

1. (Previously amended) A peptide comprising a modified tandem GnRH decapeptide sequence capable of inducing an immunogenic response that allows for discrimination between different types of GnRH.

2. (Previously amended) A peptide comprising a modified tandem GnRH decapeptide sequence which allows for a testosterone level that is essentially non-detectable after vaccination with the peptide in a suitable dosage.

3. (Twice amended) The peptide of claim 1 comprising at least two coupled GnRH decapeptide sequences, wherein at least one of the amino acids of said coupled GnRH decapeptide sequences is replaced by a different amino acid.

4. (Twice amended) The peptide of claim 1, wherein said different amino acid is Ala.

5. (Twice amended) The peptide of claim 1 wherein said peptide is selected from the group consisting of:

SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7.

10. (Twice amended) A vaccine comprising the peptide of claim 1.

11. (Twice amended) The vaccine of claim 10, further comprising an adjuvant.

12. (Twice amended) The vaccine of claim 11, wherein said adjuvant is an oil phase of an emulsion selected from the group consisting of a water-in-oil emulsion and a double oil emulsion.

13. (Twice amended) The vaccine of claim 12 that is sufficiently active for administration in a single dose for the essential immunocastration of pigs.

20. (Twice amended) A vaccine against GnRH-II comprising the peptide of claim 1.

21. (Twice amended) Composition for the treatment of prostate cancer comprising the peptide of 1.

26. (Amended) The peptide of claim 3 wherein said different amino acid is Ala.

27. (Amended) The peptide of claim 3 wherein said peptide is selected from the group consisting of:

SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7.

28. (Amended) The peptide of claim 4 wherein said peptide is selected from the group consisting of:

SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7.

34. (Amended) A vaccine comprising the peptide of claim 1.

35. (Amended) A vaccine comprising the peptide of claim 3.

36. (Amended) A vaccine comprising the peptide of claim 5.

51. (Amended) A vaccine against GnRH-II comprising the peptide of claim 5.

52. (Amended) Composition for the treatment of prostate cancer comprising the peptide
of claim 5.